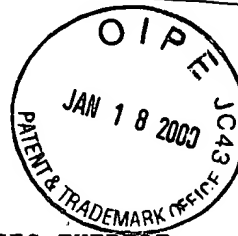


# SEQUENCE LISTING



<110> Reiter, Robert E.  
Witte, Owen N.

<120> PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF

<130> 30435.54USI4

<140> 09/359,326

<141> 1999-07-20

<150> 09/038,261

<151> 1998-03-10

<150> 09/203,939

<151> 1998-12-02

<150> 09/251,835

<151> 1999-02-17

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gcctgcagggt ggagaactgc acccagctgg gggagcagtg ctggaccgcg cgcacccgcg 180  
cagttggcct cctgaccgtc atcagcaaag gctgcagctt gaactgcgtg gatgacttac 240  
aggactacta cgtgggcaag aagaacatca cgtggtgtga caccgacttg tgcaacgcca 300  
gcggggccca tgccctgcag ccggtgtccg ccatccttgc gctgctccct gcaactcgcc 360  
tgctgctctg gggaccgggc cagctatagg ctctgggggg ccccgctgca gcccacactg 420  
ggtgtggtgc cccaggcctt tgtgccactc ctcacagaac ctggcccagt gggagcctgt 480  
cctggttcct gaggcacatc ctaacgcaag tttgaccatg tatgtttgca ccccttttcc 540  
ccnaaccctg accttcccat gggccttttc caggattccn accnggcaga tcagttttag 600  
tganacanat ccgcntgcag atggcccctc caacnnttn tgttgntgtt tccatggccc 660  
agcattttcc acccttaacc ctgtgttcag gcaactnttc ccccaggaag ccttccctgc 720  
ccacccatt tatgaattga gccaggtttg gtccgtggtg tccccgcac ccagcagggg 780  
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A13

SVB  
B41

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 <211> 123  
 <212> PRT  
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 Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn  
 20 25 30  
 Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys  
 35 40 45  
 Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys  
 50 55 60  
 Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly  
 65 70 75 80  
 Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly  
 85 90 95  
 Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala  
 100 105 110  
 Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu  
 115 120

<210> 3  
 <211> 441  
 <212> DNA  
 <213> murine PSCA (mPSCA)

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 tgcagcctgg accagcacag ttgctttaca tcgcgcatcc gggccattgg actcgtgaca 180  
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441

<210> 4

<211> 123

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Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn  
20 25 30

Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys  
35 40 45

Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys  
50 55 60

Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly  
65 70 75 80

Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly  
85 90 95

Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu  
100 105 110

Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu  
115 120

<210> 5

<211> 131

<212> PRT

<213> Human Stem Cell Antigen-2 (hSCA-2)

<400> 5

Met Lys Ile Phe Leu Pro Val Leu Leu Ala Ala Leu Leu Gly Val Glu  
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Pro Ala Ser Ser Leu Met Cys Phe Ser Cys Leu Asn Gln Lys Ser Asn  
20 25 30

Leu Tyr Cys Leu Lys Pro Thr Ile Cys Ser Asp Gln Asp Asn Tyr Cys  
35 40 45

Val Thr Val Ser Ala Ser Ala Gly Ile Gly Asn Leu Val Thr Phe Gly  
50 55 60

His Ser Leu Ser Lys Thr Cys Ser Pro Ala Cys Pro Ile Pro Glu Gly  
65 70 75 80

Val Asn Val Gly Val Ala Ser Met Gly Ile Ser Cys Cys Gln Ser Phe  
85 90 95

Leu Cys Asn Phe Ser Ala Ala Asp Gly Gly Leu Arg Ala Ser Val Thr  
100 105 110

Leu Leu Gly Ala Gly Leu Leu Leu Ser Leu Leu Pro Ala Leu Leu Arg  
115 120 125

Phe Gly Pro  
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<210> 6

<211> 123

<212> PRT

<213> human PSCA (hPSCA)

<400> 6

Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly Leu Ala Leu Gln  
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Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn  
20 25 30

Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys  
35 40 45

Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys  
50 55 60

Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly  
65 70 75 80

Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly  
85 90 95

Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala  
100 105 110

Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu  
115 120

<210> 7  
<211> 123  
<212> PRT  
<213> murine PSCA (mPSCA)

<400> 7  
Met Lys Thr Val Leu Phe Leu Leu Leu Ala Thr Tyr Leu Ala Leu His  
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Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn  
20 25 30  
Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys  
35 40 45  
Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys  
50 55 60  
Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly  
65 70 75 80  
Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly  
85 90 95  
Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu  
100 105 110  
Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu  
115 120

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<212> DNA  
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<400> 8  
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<210> 9  
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<212> DNA  
<213> murine PSCA (mPSCA)

<400> 9  
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<210> 10  
<211> 408  
<212> DNA  
<213> SCID Mice

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aacattaaag actactatat acactgggtg aatcagaggc ctgaccaggg cctggagtgg 180  
attggatgga ttgatcctga gaatggtgac actgaatttg tcccgaagtt ccagggaag 240  
gccactatga ctgcagacat tttctccaac acagcctacc tgcacctcag cagcctgaca 300  
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<210> 11  
<211> 136  
<212> PRT  
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Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Ser Gly Ala Ser Val Lys  
20 25 30

Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Tyr Tyr Ile His  
35 40 45

Trp Val Asn Gln Arg Pro Asp Gln Gly Leu Glu Trp Ile Gly Trp Ile  
50 55 60

Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe Gln Gly Lys  
65 70 75 80

Ala Thr Met Thr Ala Asp Ile Phe Ser Asn Thr Ala Tyr Leu His Leu  
85 90 95

Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Lys Thr Gly  
100 105 110

Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr  
115 120 125

Thr Pro Pro Ser Val Tyr Pro Leu  
130 135

<210> 12  
<211> 426  
<212> DNA  
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agctactgga tgcactgggt gaagcagagg cctggacaag gccttgagtg gattggaaat 180  
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<213> SCID Mice

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Pro Gly Ser Glu Leu Val Arg Pro Gly Thr Ser Val Lys Leu Ser Cys  
20 25 30

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Lys Ala Ser Gly Tyr Thr Phe Ser Ser Tyr Trp Met His Trp Val Lys  
35 40 45

Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly Asn Ile Asp Pro Gly  
50 55 60

Ser Gly Tyr Thr Asn Tyr Ala Glu Asn Leu Lys Thr Lys Ala Thr Leu  
65 70 75 80

Thr Val Asp Thr Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu  
85 90 95

Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys Thr Ser Arg Ser Thr Met  
100 105 110

Ile Thr Thr Gly Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val  
115 120 125

Ser Ala Ala Thr Thr Thr Ala Pro Ser Val Tyr Pro Leu Ala  
130 135 140

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<211> 453  
<212> DNA  
<213> SCID Mice

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tgtgtagcct ctggatttac tttcagtaat tactggatga cttgggtccg ccagtctcca 180  
gagaaggggc ttgagtgggt tgctgaaatt cgattgagat ctgaaaatta tgcaacacat 240  
tatgcggagt ctgtgaaagg gaaattcacc atctcaagag atgattccag aagtcgtctc 300  
tacctgcaaa tgaacaactt aagacctgaa gacagtggaa tttattactg tacagatggg 360  
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<210> 15  
<211> 151  
<212> PRT  
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Val Arg Ser Glu Val Arg Leu Glu Glu Ser Gly Gly Gly Trp Val Gln  
20 25 30

Pro Gly Gly Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Thr Phe  
35 40 45

Ser Asn Tyr Trp Met Thr Trp Val Arg Gln Ser Pro Glu Lys Gly Leu  
50 55 60

Glu Trp Val Ala Glu Ile Arg Leu Arg Ser Glu Asn Tyr Ala Thr His  
65 70 75 80

Tyr Ala Glu Ser Val Lys Gly Lys Phe Thr Ile Ser Arg Asp Asp Ser  
85 90 95

Arg Ser Arg Leu Tyr Leu Gln Met Asn Asn Leu Arg Pro Glu Asp Ser  
100 105 110

Gly Ile Tyr Tyr Cys Thr Asp Gly Leu Gly Arg Pro Asn Trp Gly Gln  
115 120 125

Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr Thr Pro Pro Ser Val



130

135

140

Tyr Pro Leu Ala Pro Cys Val  
145 150

AL3A

